

1. (Amended) A process for producing a methacrylate-based block copolymer, comprising:

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polymerizing (d1) a radical-polymerizable monomer containing at least one methacrylate-based monomer in the presence of (c1) a redox catalyst comprising a metal complex containing at least one transition metal as a central metal selected from the group consisting of elements of Groups 7 to 11 of the Periodic Table, said redox catalyst containing a low-valence metal $(M)^n$ wherein n represents an atomic valence of the metal, and a high-valence metal $(M)^{n+1}$ both constituting the redox catalyst system, and having a molar ratio of $(M)^n$ to $(M)^{n+1}$ of 90/10 to 0.1/99.9, upon initiation of the polymerization, using (a1) at least one polymerization solvent selected from the group consisting of water, ethers, amides, nitriles and alcohols, and (b1) a polymerization initiator selected from [the group consisting of organohalogen compounds, halogenated sulfonyl compounds and] halogen-containing macroinitiators.

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